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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Petrol Valves USA

File Reference: P4422-3001

Intl. Appln. No.: PCT/US04/36827

Intl. Filind Date: 05 November 2004

For: **METAL VALVE STEM AND SEALING
SYSTEM**

RESPONSE TO WRITTEN OPINION

International Bureau of WIPO
34, chemin des Colombettes
1211 Geneva 20
Switzerland

Sir:

This Response and Amendment to the Claims is filed in response to the Written Opinion mailed June 9, 2005 for the above-referenced PCT Application.

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Date of Deposit: August 8, 2005

I hereby certify that this paper is being deposited with the International Federal Express overnight courier on the date indicated above and is addressed to: International Bureau of WIPO, 34, chemin des Colombettes, 1211 Geneva 20, Switzerland.

Teresa L. Gross
Signature

TERESA L. GROSS
Typed or Printed Name of Person Mailing Paper or Fee

The claims in the pending PCT application have been amended as follows:

Claims 1 and 3-20 are unchanged. Claim 2 is replaced by amended claim 2.

Claim 2 has been amended to depend from claim 1 rather than depending from claim 2.

A replacement sheet is submitted for the original sheet containing claim 2.

Respectfully submitted,

BUCHALTER, NEMER, FIELDS & YOUNGER

Date: August 8, 2005

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CLAIMS

What is claimed is:

1. A metal valve stem sealing system comprising:
 - a valve body;
 - 5 a metal valve stem housed within the valve body;
 - a bonnet member housed within the valve body;
 - a U-shaped metal stem gasket positioned between the metal valve stem and the bonnet member, wherein the gasket has a first lip member and a second lip member each having an interior surface and an exterior surface;
 - 10 a metal wedge ring fitted between the interior surface of the first lip member and the interior surface of the second lip member; and,
 - at least one metal energizing spring adjacent the wedge ring, wherein the metal energizing spring applies a sufficient force to the wedge ring to cause the wedge ring to apply a sufficient contact pressure to the first and second lip members to expand the first and second lip members to form a seal between the gasket and the metal valve stem and to form a seal between the gasket and the bonnet member.
2. The metal valve stem sealing system of claim 1 further comprising an anti-rotation pin attached to the metal stem gasket.
- 20 3. The sealing system of claim 1 wherein the first lip member is coated on an exterior surface with an alloy selected from the group of alloys comprising tungsten carbides and chromium carbides.

CLAIMS

What is claimed is:

1. A metal valve stem sealing system comprising:
 - a valve body;
 - 5 a metal valve stem housed within the valve body;
 - a bonnet member housed within the valve body;
 - a U-shaped metal stem gasket positioned between the metal valve stem and the bonnet member, wherein the gasket has a first lip member and a second lip member each having an interior surface and an exterior surface;
- 10 a metal wedge ring fitted between the interior surface of the first lip member and the interior surface of the second lip member; and,
 - at least one metal energizing spring adjacent the wedge ring, wherein the metal energizing spring applies a sufficient force to the wedge ring to cause the wedge ring to apply a sufficient contact pressure to the first and second lip members to expand the first and second lip members to form a seal between the gasket and the metal valve stem and to form a seal between the gasket and the bonnet member.
- 15 2. The metal valve stem sealing system of claim 2 further comprising an anti-rotation pin attached to the metal stem gasket.
- 20 3. The sealing system of claim 1 wherein the first lip member is coated on an exterior surface with an alloy selected from the group of alloys comprising tungsten carbides and chromium carbides.